

REMARKS

Claims 1-34 are currently pending in this application. The present amendment adds new claims 35-45 and cancels claims 2-4, 8-14, 18, and 19. Reconsideration is respectfully requested in light of the above claim amendments and the following remarks.

Drawings

Replacement drawing sheets are submitted herewith to overcome the objections. Acceptance of these drawing sheets is respectfully requested.

35 U.S.C. § 112 Rejections

The Examiner has rejected claims 26-29 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 26-29 have each been amended in the manner suggested by the Examiner. Withdrawal of the rejection is respectfully requested.

35 U.S.C. § 102 Rejections

The Examiner has rejected claims 1, 5-7, 15 and 17 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application 2003/0105499 to Hartley et al.

Claim 1 has been amended to include the limitations of claim 2 which was indicated as being allowable if rewritten in independent form. Claims 5-7 depend

directly or indirectly from amended independent claim 1 and should therefore also be allowable. Claim 2 has been canceled.

Claim 15 has been amended to specify that the hemodynamic signal is by a photoplethysmography sensor. In the Office Action it was stated with regard to claims 18 and 19, they “fail to recite any additional physical structures which would further limit them, hence the rejection.” The photoplethysmography sensor in amended claim 15 is provided by positive recitation. It is respectfully submitted that neither Hartley nor the other cited references discloses using a photoplethysmography sensor. Allowance of amended claim 15 is therefore respectfully requested. Claims 16 and 17 depend from amended claim 15 and should also be allowable.

The Examiner has rejected claims 1, 5, 6 and 15 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,096,061 to Alt et al. or U.S. Patent 5,044,366 to Alt. For at least the reasons stated above in response to the section 102 rejection over Hartley et al., amended independent claims 1 and 15 are patentable over the Alt et al '061 and '366 patents. Withdrawal of the rejection is respectfully requested.

35 U.S.C. § 103 Rejections

The Examiner has rejected claims 16, 18 and 19 under 35 U.S.C. § 102(e) as being anticipated by or in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent Application 2003/0105499 to Hartley et al. Claim 16 depends from amended independent claim 15 and should be allowable for at least the reasons

stated above with respect to the section 102 rejection. Claims 18 and 19 have been canceled by the present amendment.

Allowable Subject Matter

Claims 2-4, 8-14 and 20 have been indicated as being allowable if rewritten in independent form. Claim 1 has been amended to include the limitations of claim 2. Claims 3 and 4 have been rewritten in independent form as new claims 35 and 37, respectively, and claims 2, 3 and 4 have been canceled. Claims 8-14 have each been canceled and rewritten in independent form as new claims 39-45. Allowance of these claims is respectfully requested.

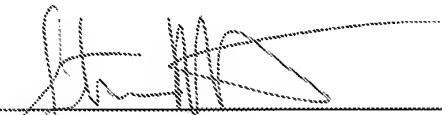
Claims 21-25 and 30-34 have been allowed.

In view of the amendments above, claims 1, 5-7, 15-17, and 20-45 remain pending in the application. Applicant respectfully submits that the present application with 1, 5-7, 15-17, and 20-45 is now in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance and passage to issue of the present application, the Examiner is invited to call Steven M. Mitchell at (408) 522-6101.

Pursuant to 37 C.F.R. 1.136(a)(3), Applicant hereby requests and authorizes the U.S. Patent and Trademark Office to (1) treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time and (2) charge all required fees, including extension of time fees and fees under 37 C.F.R. 1.16 and 1.17, to Deposit Account No. 22-0265.

Respectfully submitted,

Dated: 9/1/05

By: 
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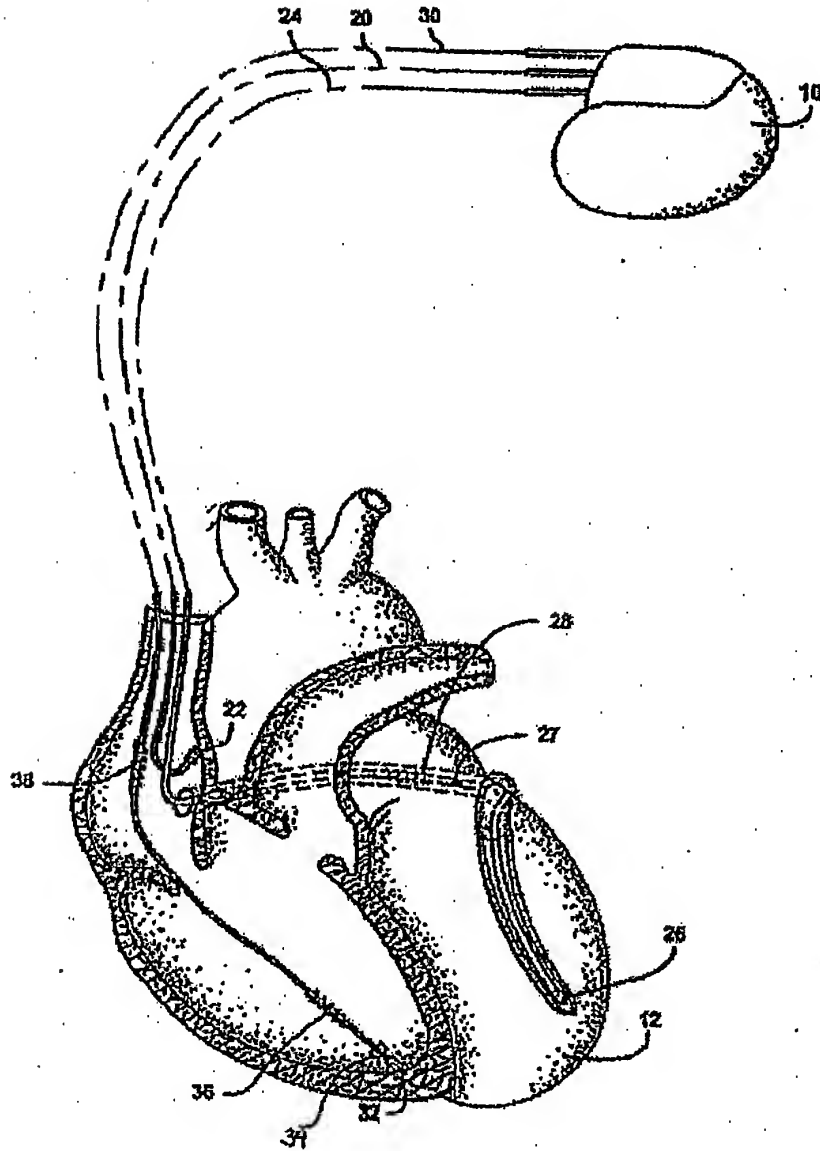
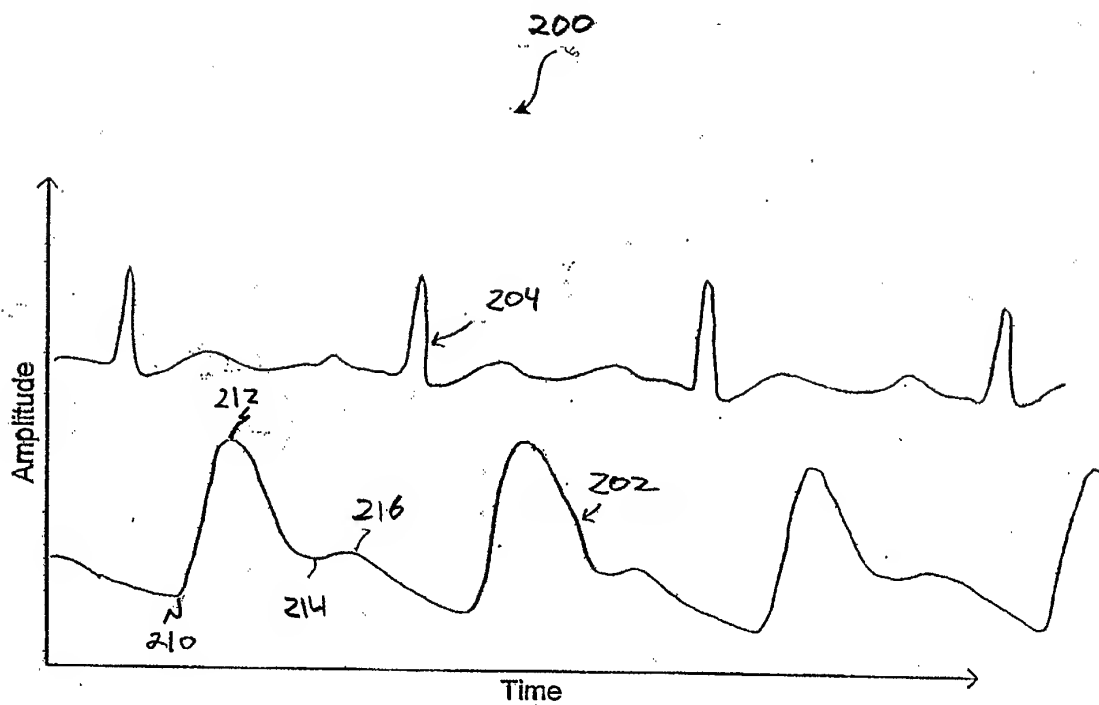
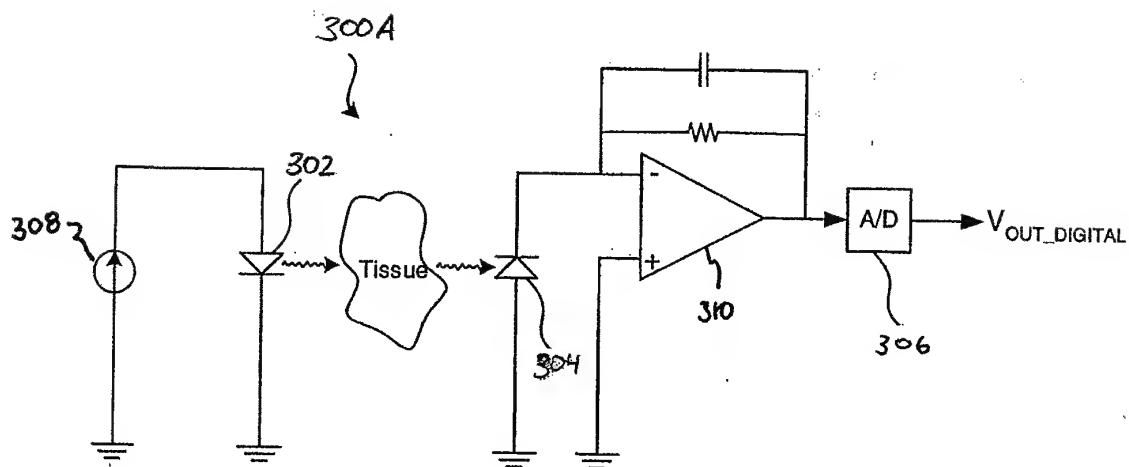


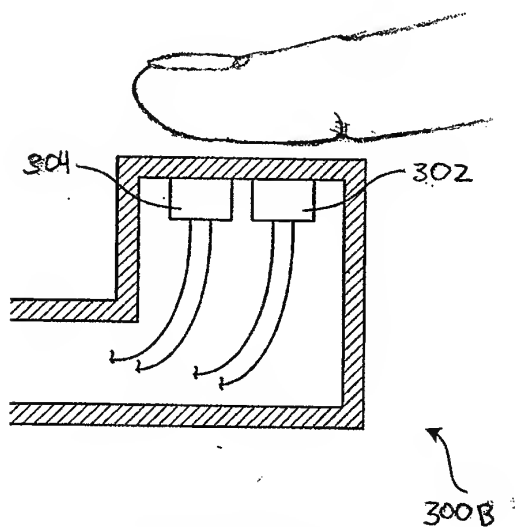
FIG. 1A



~~FIG. 2~~



~~FIG. 3A~~



~~FIG. 3B~~

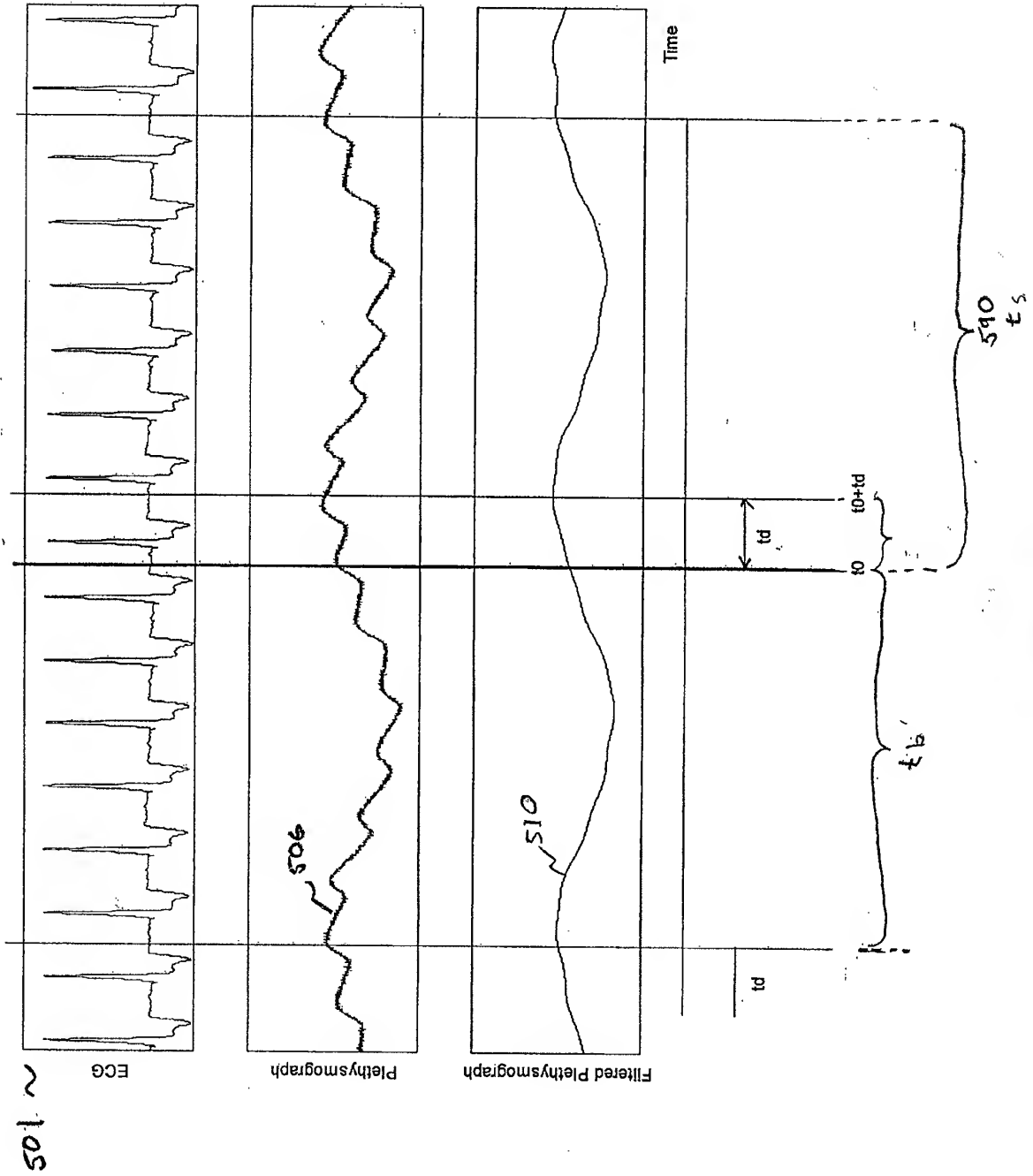


Fig. 5

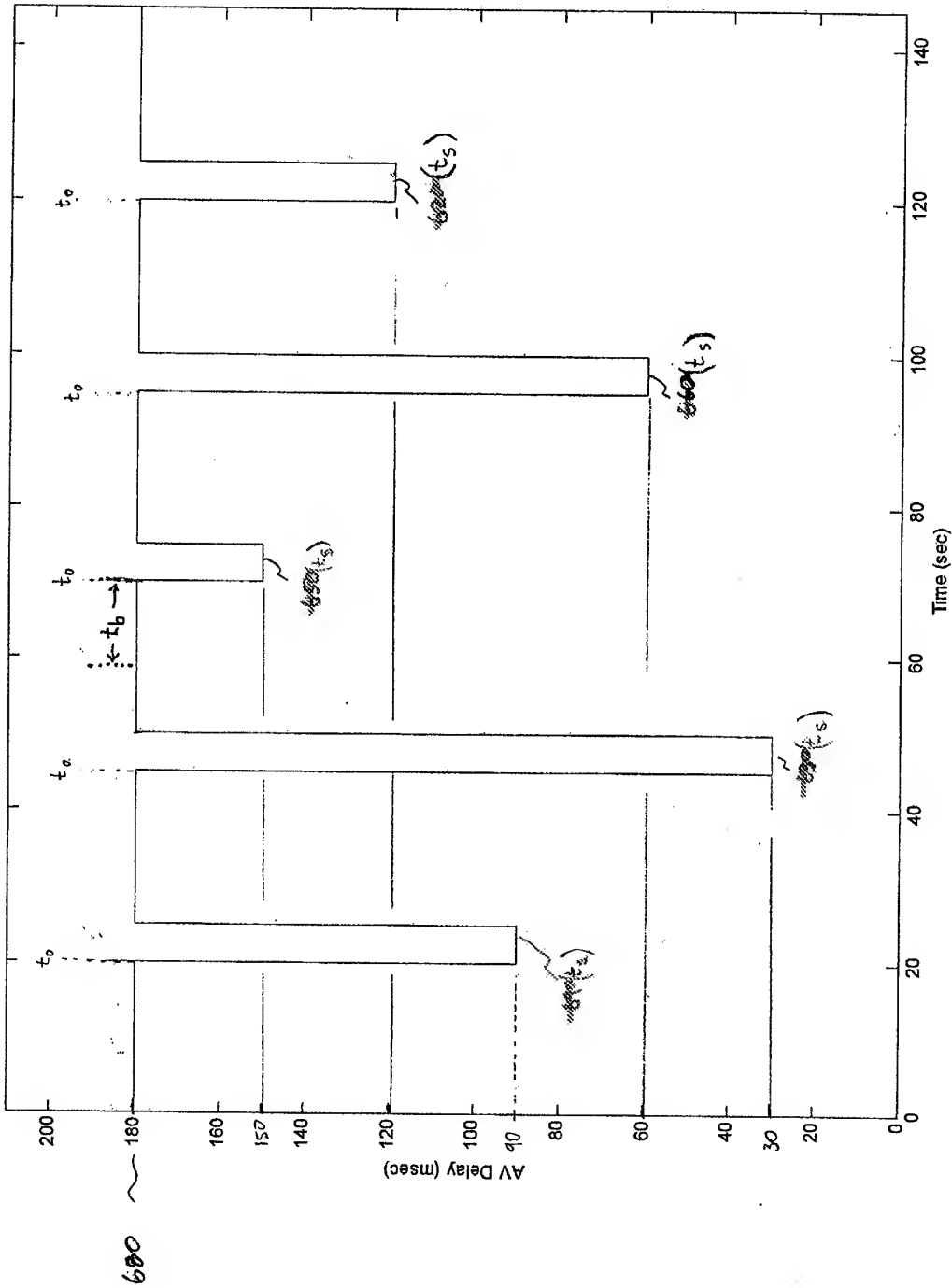
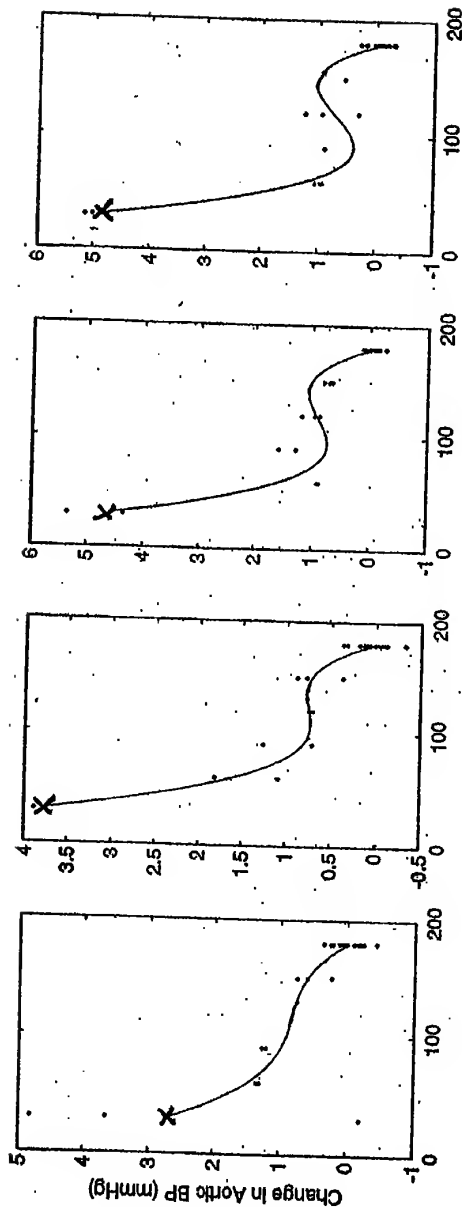
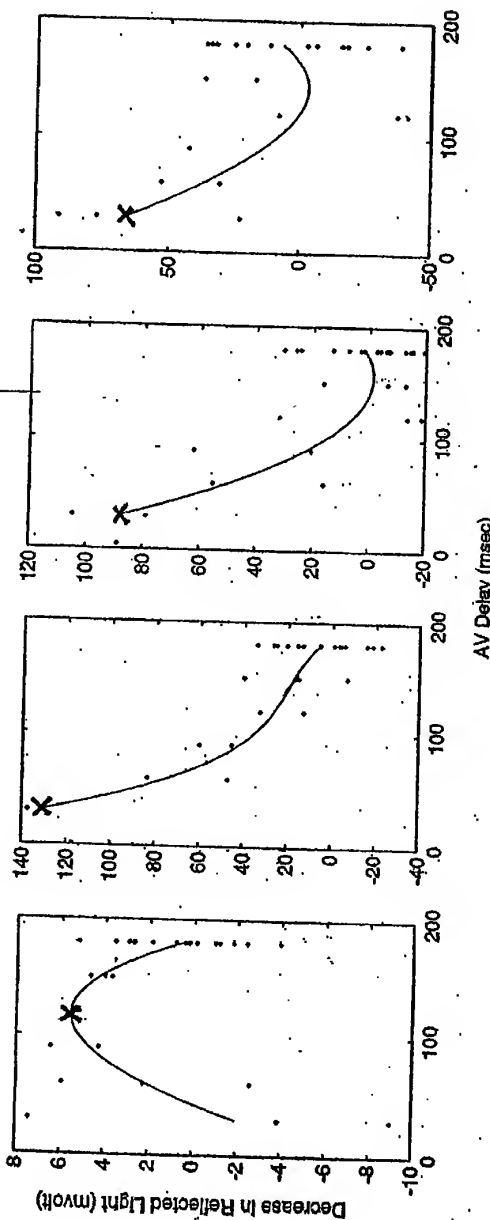


Fig. 6

PRESSURE



PLETHYSMOGRAPH

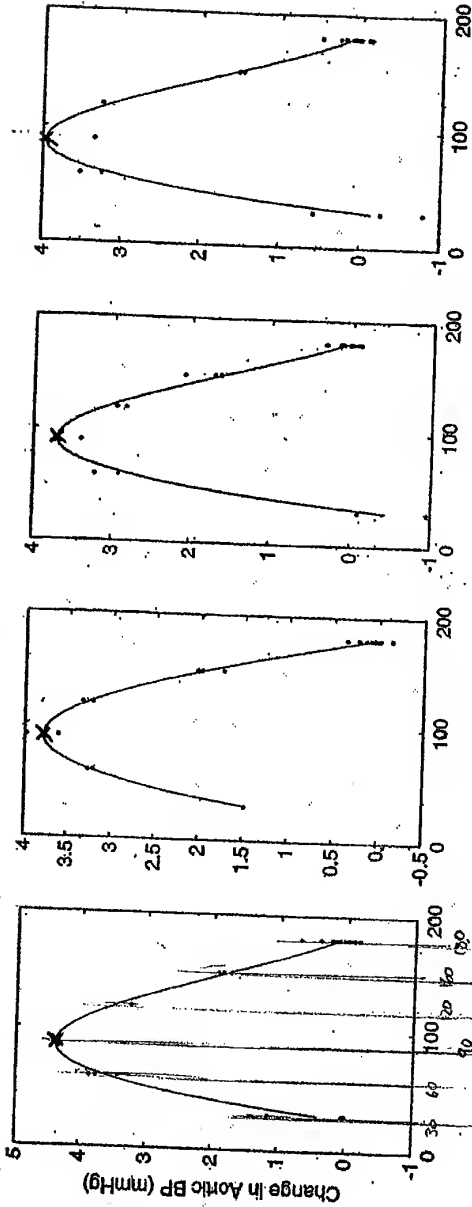


PULSE AMPLITUDE ANALYSIS

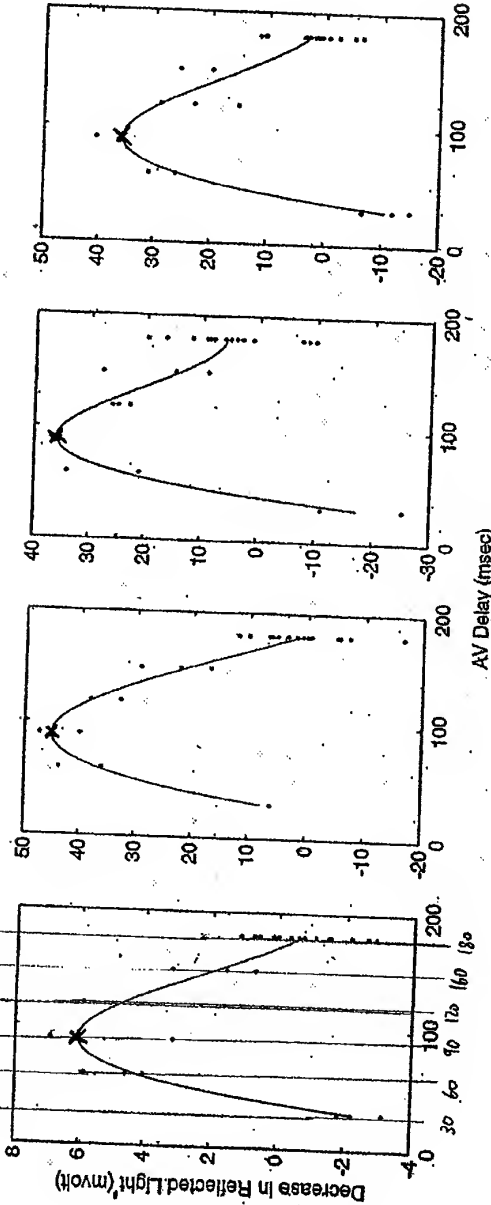
$1 < f < 20 \text{ Hz}$

FIG. 8

PRESSURE



PLETHYSMOGRAPHY



LOW FREQUENCY ANALYSIS

$f < 1 \text{ Hz}$

FIG. 9

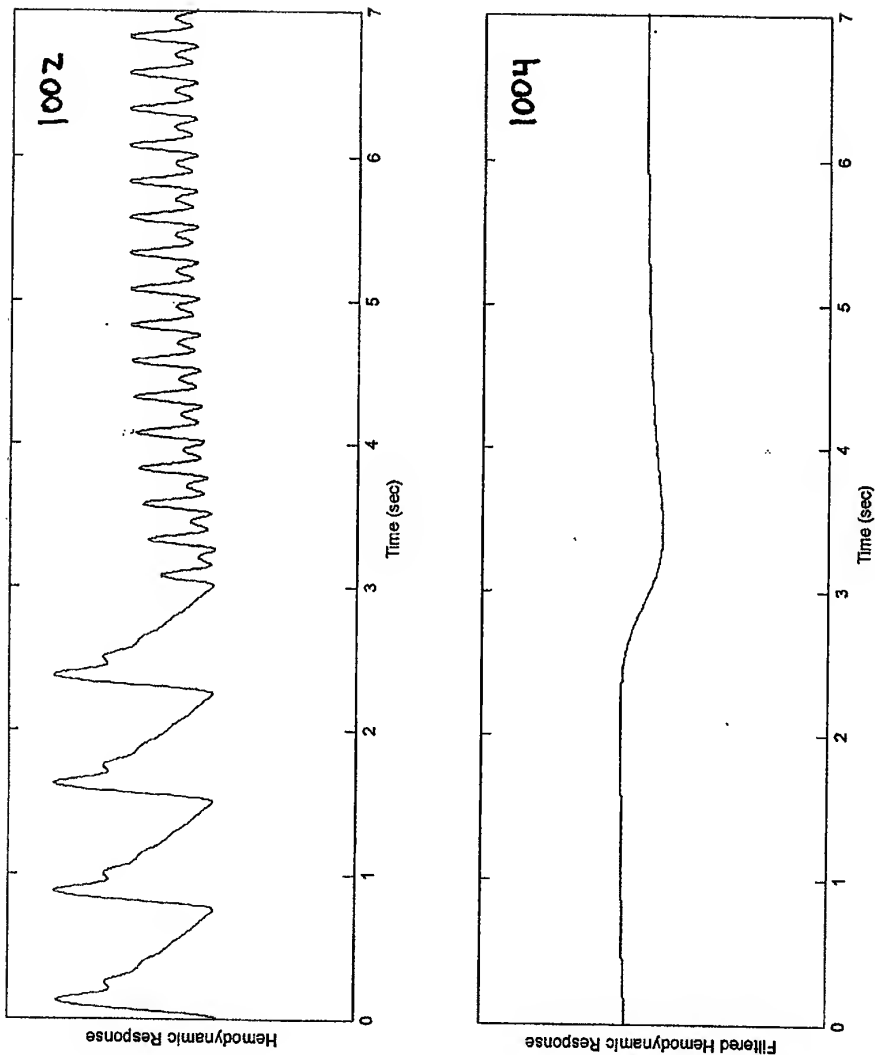
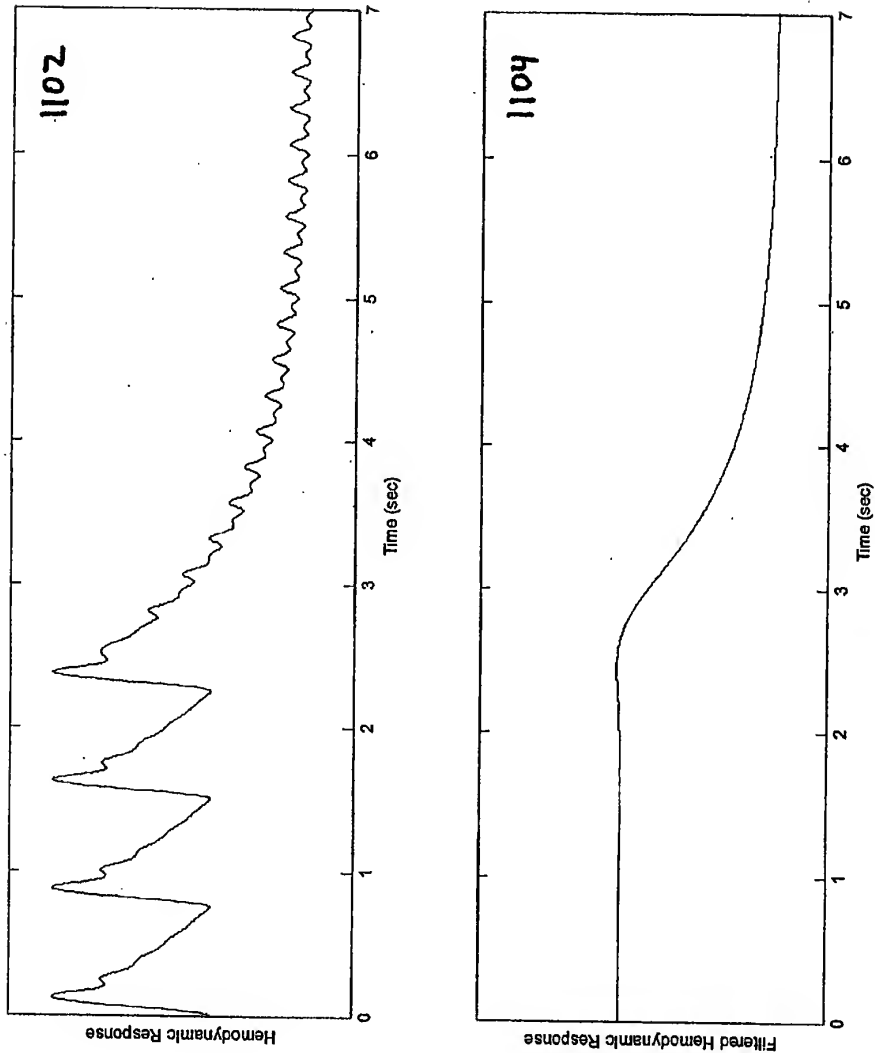
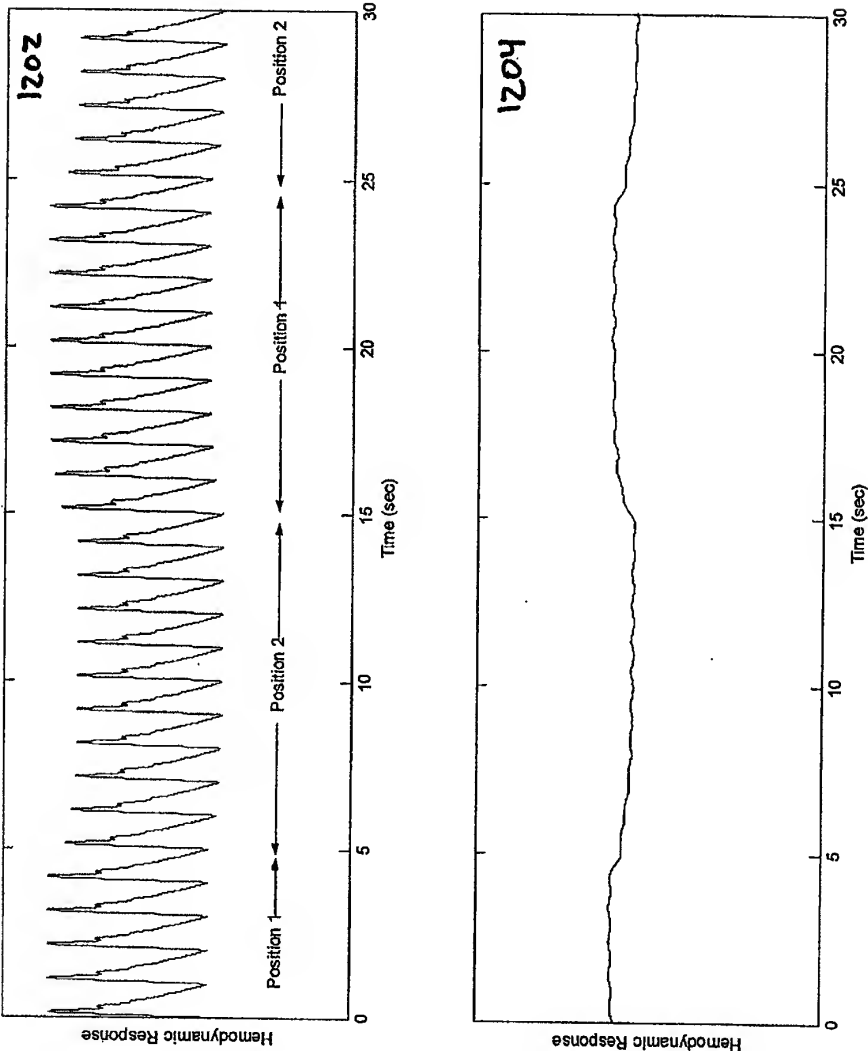


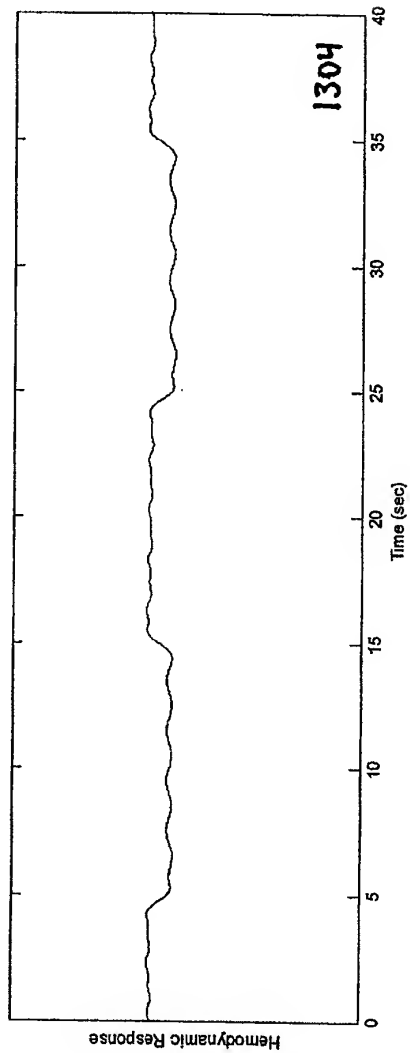
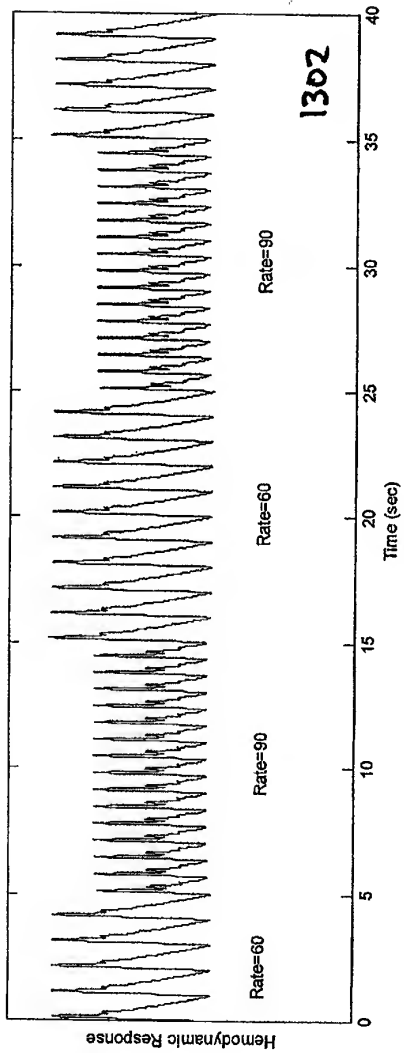
FIG. 10



~~FIG. 11~~



~~FIG. 12A~~



~~Fig. 13A~~